1090358

AUG 0 6 2009

## ARCHITECT iValproic Acid

## 510(k) Summary (Summary of Safety and Effectiveness)

This summary of the 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

## **Applicant Name:**

Judi Wallach

Regulatory Affairs Specialist

Abbott Laboratories

100 Abbott Park Road

Abbott Park, IL 60064

#### **Device Name:**

### Reagents:

Classification Name: Valproic Acid test system

Trade Name: ARCHITECT iValproic Acid Immunoassay

Common Name: Valproic Acid test

Governing Regulation: 862.3645

Device Classification: Class II

Classification Panel: Toxicology

Product Code: LEG

## **Calibrators:**

Classification Name: Calibrator, drug specific

Trade Name: ARCHITECT iValproic Acid Calibrators (A-F)

Common Name: Calibrator

Governing Regulation: 862.3200

Device Classification: Class II

Classification Panel: Toxicology

Product Code: DLJ

#### Legally marketed device to which equivalency is claimed:

AxSYM Valproic Acid (K941615)

#### **Intended Use of Device:**

The ARCHITECT iValproic Acid assay is an *in vitro* chemiluminescent microparticle immunoassay (CMIA) for the quantitative measurement of valproic acid, an anticonvulsant drug, in human serum or plasma on the ARCHITECT i System with STAT protocol capability. The measurements obtained are used in monitoring levels of valproic acid to help ensure appropriate therapy.

#### **Description of Device:**

The ARCHITECT *i*Valproic Acid assay is a one-step *STAT* immunoassay for the quantitative measurement of valproic acid in human serum or plasma using CMIA technology with flexible assay protocols, referred to as Chemiflex. Sample, antivalproic acid coated paramagnetic microparticles, and valproic acid acridiniumlabeled conjugate are combined to create a reaction mixture. The anti-valproic acid coated microparticles bind to valproic acid present in the sample and to the valproic acid acridinium-labeled conjugate. After washing, pre-trigger and trigger solutions are added to the reaction mixture. The resulting chemiluminescent reaction is measured as relative light units (RLUs). An indirect relationship exists between the amount of valproic acid in the sample and the RLUs detected by the ARCHITECT *i* System optics.

#### Comparison of Technological Characteristics:

The ARCHITECT iValproic Acid assay utilizes Chemiluminescent Microparticle Immunoassay (CMIA) technology for the quantitative measurement of valproic acid, an anticonvulsant drug, in human serum and plasma. The AxSYM Valproic Acid assay utilizes Fluorescence Polarization Immunoassay (FPIA) technology for the quantitative measurement of valproic acid, an anticonvulsant drug, in serum or plasma.

## **Summary of Non-Clinical Performance:**

The ARCHITECT *i*Valproic Acid assay is substantially equivalent to the AxSYM Valproic Acid assay in terms of precision, linearity, and interferences as demonstrated in non-clinical performance data in this 510(k) submission.

## **Summary of Clinical Performance:**

The ARCHITECT iValproic Acid assay demonstrated substantially equivalent performance to the AxSYM Valproic Acid assay with a correlation coefficient of 0.986.



#### DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration 10903 New Hampshire Avenue Document Mail Center – WO66-**Q**609 Silver Spring, MD 20993-0002

Abbott Laboratories Inc.,
Diagnostic Division
c/o Ms. Judi Wallach
Senior Regulatory Affairs Specialist
100 Abbott Park Road, AP6C-2, Dept 049C
Abbott Park, IL 60064

Re: k090358

Trade Name: Architect iValproic Acid Immunoassay and Architect iValproic

AUG 0 6 2009

Acid Calibrators (A-F)

Regulation Number: 21 CFR §862.3645

Regulation Name: Neuroleptic Drugs Radioreceptor Assay Test System

Regulatory Class: Class II Product Codes: LEG, DLJ Dated: June 24, 2009 Received: June 25, 2009

Dear Ms. Wallach:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of *In Vitro* Diagnostic Device Evaluation and Safety at (301) 796-5450. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at (301) 796-5760. For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <a href="http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm">http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm</a> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-5680 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>.

Sincerely yours,

Courtney C. Harper, Ph.D.

**Acting Director** 

Division of Chemistry and Toxicology Office of *In Vitro* Diagnostic Device

Evaluation and Safety

Center for Devices and Radiological Health

Enclosure

# Indication for Use

510(k) Number (if known):
Device Name: ARCHITECT iValproic Acid
Indication for Use:
Reagents
The ARCHITECT iValproic Acid assay is an in vitro chemiluminescent microparticle immunoassay (CMIA) for the quantitative measurement of valproic acid, an anticonvulsant drug, in human serum or plasma on the ARCHITECT i System with STAT protocol capability. The measurements obtained are used in monitoring levels of valproic acid to help ensure appropriate therapy.
<u>Calibrators</u>
The ARCHITECT <i>i</i> Valproic Acid Calibrators are for the calibration of the ARCHITECT <i>i</i> System with <i>STAT</i> protocol capability when used for the quantitative determination of valproic acid in human serum or plasma.
Prescription Use X And/Or Over-The-Counter Use (Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)
(PLEASE DO NOT WRITE BELOW THIS LINE; CONTINUE ON ANOTHER PAGE IF NEEDED)
Concurrence of CDRH, Office of In Vitro Diagnostic Device Evaluation and Safety (OIVD)  Division Sign-Off Office of In Vitro Diagnostic Device Evaluation and Safety

510(k)\_\_k090358\_